

Meal Breaks and Mental Health: A Total Worker Health™ approach among hospital nurses

David A. Hurtado, ScD, ScM
Yerby Postdoctoral Research Fellow
Center for Work, Health and Well-being
Harvard School of Public Health

Outline Presentation

1. Relevance of breaks for health protection and health promotion
2. Total Worker Health™ guiding principles
3. Analytic challenges and empirical strategy
4. Results and implications for basic and applied research

Nurses are always on the run



**"I FIGHT FATIGUE SAFELY
with NODŌZ AWAKENERS"**

Thousands of nurses know and recommend NoDoz Awakeners to fight ordinary fatigue—caused by the fast pace of the Fabulous Fifties.

YOUR DOCTOR WILL TELL YOU
that a NoDoz Awakener contains nothing but caffeine—the alerting agent of coffee. Each tablet is as effective and as harmless as a cup of coffee.

For sale everywhere—15 tablets 25¢

KEEP AWAKE SAFELY
Tired Sleepy?
NODŌZ
AWAKENERS
15 TABLETS—EACH ONE WITH THE CAFFEINE CONTENT OF AN AVERAGE CUP OF COFFEE
EACH TABLET
HARMLESS AS A CUP OF COFFEE

millions
sold since 1933

Relevance of Breaks for Health protection and health promotion

- Rest periods are a marker of Decent Work (ILO)
- Consecutive work hours w/o breaks → risk of:
 - Injury (Tucker, 2003)
 - MSD (Punnett & Wegman, 2004)
 - CVD (Landsbergis, Cahill, & Schnall, 1999)
 - Mental illness (Geiger-brown, Muntaner, Lipscomb, & Trinkoff, 2004)
- Workplace interventions introducing, enforcing or promoting breaks have improved these outcomes (Silverstein & Clark, 2004)
- Breaks may promote workplace physical activity (Sonntag, 2001), healthy eating (Faugier, Lancaster, Pickles, & Dobson, 2001), leisure and social engagement (Jett & George, 2003)

Challenges for Health Research

- Elucidating the pathway and mechanisms
 - Psycho-physiological factors
 - Types of breaks
 - Socioeconomic distribution
- Individual and Interpersonal factors
 - Coworkers
 - Managers
 - Individual needs and preferences
- Environmental factors

Challenges in a nursing workforce

- Patients before workers
- Job demands, busyness and fast pace
- Internal factors
 - Rotating shifts
 - Commute
 - Second Jobs
- External factors
 - Nurse directors styles
 - Environmental/contextual factors
 - Paid hours

Total Worker Health™

Issues Relevant to a TOTAL WORKER HEALTH™ Perspective*

| WORKPLACE <i>Protecting Worker Safety & Health</i> | EMPLOYMENT <i>Preserving Human Resources</i> | WORKERS <i>Promoting Worker Health & Well-Being</i> |
|---|---|--|
| <p>Control of Hazards & Exposures:</p> <ul style="list-style-type: none"> • Chemicals • Physical Agents • Biological Agents • Psychosocial Factors • Organization of Work <p>Prevention of Injuries, Illness & Fatalities</p> <p>Promoting Safe & Healthy Work:</p> <ul style="list-style-type: none"> • Management Commitment • Safety Culture/Climate • Culture of Health • Hazard Recognition Training • Worker Empowerment <p>Risk Assessment & Control:</p> <ul style="list-style-type: none"> • Making the Safety & Health Case • Assessing All Risks • Controlling All Risks • Root Cause Analysis • Leading/Lagging Indicators | <p>New Employment Patterns:</p> <ul style="list-style-type: none"> • Precarious Employment • Part-time Employment • Dual Employers • Changing Demographics <ul style="list-style-type: none"> – Increasing Diversity – Aging Workforce – Multigenerational Workforce • Global Workforce <p>Health & Productivity:</p> <ul style="list-style-type: none"> • Leadership Commitment to Health-Supportive Culture • Fitness-for-Duty • Reducing Presenteeism • Reducing Absenteeism • Workplace Wellness Programs <p>Healthcare & Benefits:</p> <ul style="list-style-type: none"> • Increasing Costs • Cost Shifting to Workers • Paid Sick Leave • Electronic Health Record • Affordable Care Act • HIPAA[†] Health Information Privacy | <p>Optimal Well-Being:</p> <ul style="list-style-type: none"> • Employee Engagement • Health & Well-Being Assessments • Healthier Behaviors <ul style="list-style-type: none"> – Nutrition – Tobacco Use Cessation – Physical Activity – Work/Life Balance • Aging Productively • Preparing for Healthier Retirement • Policy & Built Environment Supports <p>Workers with Higher Health Risks:</p> <ul style="list-style-type: none"> • Young Workers • Low-Income Workers • Migrant Workers • Workers New to a Hazardous Job • Differently-Abled Workers • Veterans <p>Compensation & Disability:</p> <ul style="list-style-type: none"> • Disability Evaluation • Reasonable Accommodations • Return-to-Work • Social Security Disability Insurance |

*Issues in these lists are for illustrative purposes, are not meant to be exhaustive nor do they necessarily reflect equivalent importance.

[†]Health Insurance Portability and Accountability Act

Total Worker Health™

- Promoting Safe and Healthy Work
- Organizational Culture and Leadership
- Develop a “Human Centered Culture”
- Demonstrate leadership
- Engage mid-level management

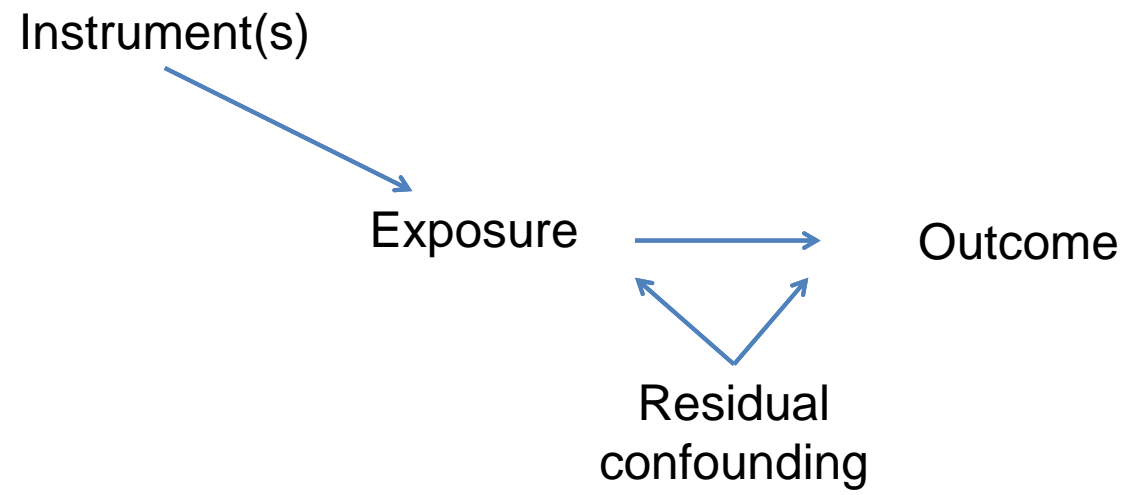
Research Questions

- How managers influence workers' break practices?
- Are meal breaks associated with better mental health?
- How to address endogenous bias?

Methods

- Cross-sectional survey (n=1,594) in 2012
- Patient-care workers under a nursing directors (n=82)
- Outcome: Psychological Distress (K6)
- Exposure: Meal Breaks
 - Worker-level: questionnaire about meal break frequency
 - Manager-level: meal break managerial styles
- Control variables:
 - Staff adequacy
 - Socio-demographic characteristics
 - Occupational characteristics

Analytical Strategy



Nurse Directors' Break Questionnaire

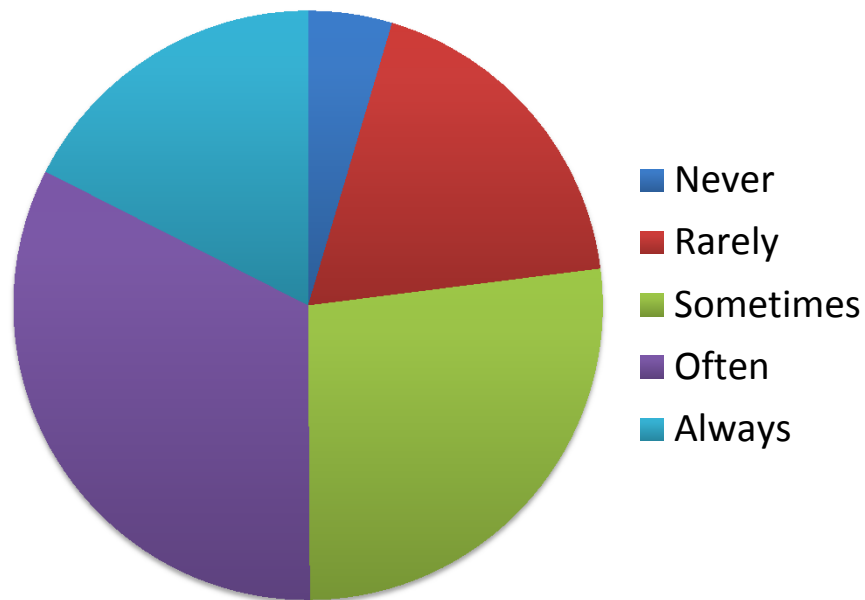
| | Never | Rarely | Sometimes | Often | Always |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| a. staff are supported in leaving the unit for their meal break. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. staff are able to leave the unit for their meal break. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. staff are able to take their full meal break. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Workers' Meal Breaks Questionnaire

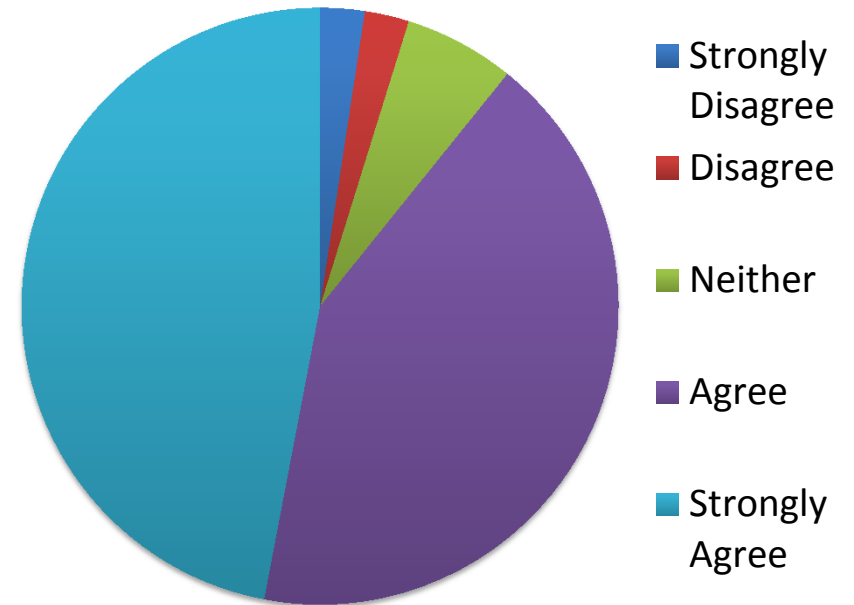
| | Always | Often | Sometimes | Rarely | Never | Not Applica ble/ Breaks Not Allowed |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--|
| a. Within the last year, how often have you left the unit for your meal break? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. How often are you able to take your full meal break? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Results – Distributions of Meal Breaks

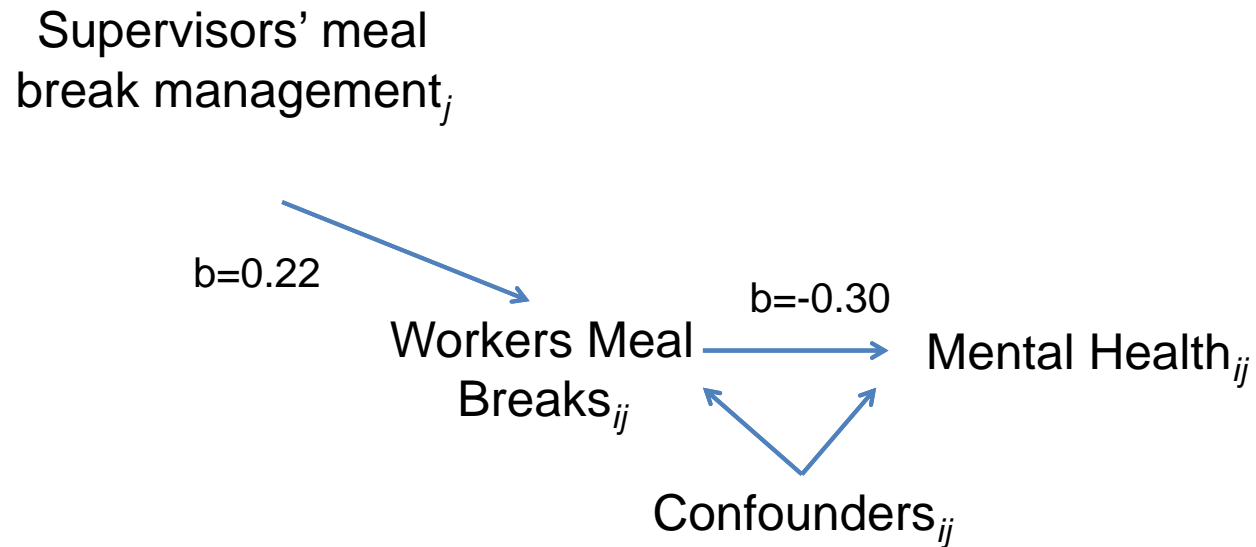
How often are you able to take your full meal break?



Staff are supported in leaving the unit for their meal break



Results



Conclusions

- Nurses who took meal breaks more frequently had more supportive nurse directors.
- Higher frequency in nurses' meal breaks (conditional on managers' support) were linked with lower psychological distress
- Meal breaks are daily opportunities for
 - Recovery from fatigue or personal downtime
 - To facilitate access to healthier meals, to enjoy meals
 - To have leisure moments

Implications for research and practice

- Target factors of the work environment that are relevant for both occupational health and health promotion such as breaks
- Consider multilevel contextual interventions
 - Leadership structure
 - Social norms
 - Incentives
 - Environmental factors
 - Individual needs and preferences

Thanks for your attention

David A. Hurtado, ScD, ScM

Yerby Postdoctoral Research Fellow

Center for Work, Health and Well-being

Harvard School of Public Health

dhurtado@mail.harvard.edu

<http://www.hsph.harvard.edu/david-hurtado/>

Acknowledgments

- Funding sources: This work was supported by a grant from the National Institute for Occupational Safety and Health (U19 OH008861) for the Harvard School of Public Health Center for Work, Health and Well-being. This study would not have been accomplished without the participation of Partners HealthCare System and leadership from Dennis Colling, Sree Chaguturu, and Kurt Westerman. The authors would like to thank Partners Occupational Health Services including Marlene Freeley for her guidance, as well as Karen Hopcia, Elizabeth Taylor, Elizabeth Tucker O'Day, and Terry Orechia. We also thank individuals at each of the hospitals including Jeanette Ives Erickson and Jacqueline Somerville in Patient Care Services leadership, and Jeff Davis and Julie Celano in Human Resources. Additionally, we wish to thank Charlene Feilteau, Mimi O'Connor, Margaret Shaw, Eddie Tan and Shari Weingarten for assistance with supporting databases. We also thank Chris Kenwood of NERI for his statistical and programming support, Julie Theron, Project Director, and Linnea Benson-Whelan for her assistance with the production of this manuscript.